

ABSTRACT OF THE DISCLOSURE

A master disc has improved film thickness distribution of a soft magnetic film embedded in the grooves formed in a silicon substrate thereof. A  $\text{SiO}_2$  film is formed on the Si substrate, and the  $\text{SiO}_2$  film is patterned and etched to form a mask for forming the grooves (magnetic pattern) on the surface of the substrate. After etching the substrate to form the grooves, a soft magnetic film is embedded in the grooves. Thereafter, the patterned  $\text{SiO}_2$  film is removed together with the soft magnetic film not embedded in the grooves. The soft magnetic film can be formed of cobalt or an alloy of iron and cobalt or alloy of iron, cobalt, and nickel.